KEY TO ARTICLES IN VOLUME 95 FOR 1994

Authors

ACKERMANN, C., PUTZ, H.-J. & GOTTSCHING, L. Deinkability of waterborne flexo inks by flotation. (T307) 8:28.
ADLER, L.S. Automated tuning technique applied to paper machine cross directional control. (T425) 11:20.
ALÉN, R. See VAN HEININGEN, A.R.P.
ALLEN, L.H. See CLAS, S-D.
ANGELL, L.-G. See JANIGAN, D.
ARPIAINEN, V.T. See VAN HEININGEN, A.R.P.
ARSENAULT, F. See STUART, P.R.
ATHER, N. See PRIDHAM, N.F.
AZARNIOUCH, M.K. See CLOUTIER, J.-N.
AZARNIOUCH, M.K. See PALEOLOGOU, M.
AZZI, D. & KROPHOLLER, H.W. Accurate control of temperature and humidity. (T533) 12:142.

BACKMAN, R.C., SIINO, F.J. & KARPOWICZ, C. The performance of jet aeration and mixing technology in activated sludge processes. (T391) 10:41.
BACKSTROM, C. See NIEMI, A.J.
BAILEY, J. The world of pulp and paper at your fingertips. 1:61.
BAILEY, J. Tripap makes a go of CPFP's old Trois-Rivières mill. 9:15.
BAILEY, J. Mill waters get the treatment. 10:15.
BAILEY, J. Top Picks. 11.10.
BAILEY, J. Printing and Graphic Arts meeting draws a diverse crowd. 12:11
BALL, J., DAWSON, I., GUNN, I., DUPUIS, M. & LYNN, W. On-line identification of digester model coefficients and transport lag. (T33) 1:52.
BARBE, M.C. See DESSUREAULT, S.
BARHAM, D. See LATVA-SOMPPI, J.
BARNET, A.J. 19TH Annual Leask Survey: Refiner capacity now stands at 95 470 tonnes a day. A. J. Barnet. 3:12.
BÉLIVEAU, D. See FLUET, A.
BENTLEY, R.G., SCUDAMORE, P. & JACK, J.S. A comparison between fibre length measurement methods. (T155) 4:41.
BERRY, R.M. See PALEOLOGOU, M.
BIALKOWSKI, W.I. See HAGGMAN, B.C.
BIALKOWSKI, W.L., HAGGMAN, B.C. & MILLETTE, S.K. Pulp and paper process control training since 1984. (T182) 5:39.
BLAIN, T., & GRANT, J. ONP re-use without deinking: Short sequence recycling. (T186) 5:43.
BORCHARDT, J.K. & MATALAMAKI, D.W. Newsprint deinking: Unit operations studies of flotation-wash deinking. (T374) 10:24.
BOUCHARD, D.C. & CROTOGINO, R.H. From dreams towards reality: Efforts and achievements reviewed at Control Systems '94. 10:11.
BOUCHER, G. & PIKULIK, I.I. Survey of additives for papers containing mechanical pulp. (T287) 7:41.
BOUREE, G.R. See PRYKE, D.C.
BRAUER, P. See KAPPEL, J.
BRUNGARDT, J.R. See HACHE, M.J.A.

CALLENDER, D. See CLOUTIER, J.-N.
CHEN, S. See OOSTHUIZEN, P.H.
CHRISTENSEN, T. See MICHAELSON, R.
CHUTE, J.R. Pulp and paper maintenance for today and tomorrow: What you really need to know. (T71) 2:44.
CLARKE, S.J. & SINGBEIL, D.L. Corrosion of titanium in alkaline peroxide bleaching media. (T417) 10:70.
CLAS, S-D. & ALLEN, L.H. Comparison of the performances of water- and oil-based defoamers. (T14) 1:33.
CLOUTIER, J.-N., AZARNIOUCH, M.K. & CALLENDER, D. Electrolysis of weak black liquor: Part III: Continuous operation test and system design considerations. (T210) 5:68.
CLOUTIER, J.-N. See PALEOLOGOU, M.
CLUETT, W.R. Process control education: An academic perspective. (T37) 1:57.
COLIN, P. See SERRES, A.
CORT, J.B. See SABOURIN, M.J.
COSSETTE, C. See JANIGAN, D.
CROMEY, S.D. Power management - a critical part of total plant management. (T436) 11:30.
CROSS, L. See KONING, A.F.
CROTOGINO, R.H. See BOUCHARD, D.C.
CUNNINGTON, R.W. See PETERS, N.
CUTTS, M.M. Project: The latest in single jet shower technology. (T355) 9:52.

DAHLQUIST, E. & JACOBS, R. Development of a dry black liquor gasification process.
DANEAULT, C., ROBERT, S. & DIONNE, P.-Y. Groundwood post-refining hydrosulphite bleaching. (T277) 7:31.
DANEAULT, C. See DESSUREAULT, S.
DANBY, R. The impact of forming fabric structures on print quality. (T29) 1:48.
DAVIS, K. See FINK, R.
DAWSON, I. See BALL, J.
DAYAL, B.S., MacGREGOR, J.F., TAYLOR, P.A., KILDAW, R. & MARCIKIC, S. Application of feedforward neural networks and partial least squares regression for modelling Kappa number in a continuous Kamyr digester. (T7) 1:26.
DESBOROUGH, L.D. & HARRIS, T.J. Control performance assessment. (T441) 11:35.
DESSUREAULT, S., LAFRENIERE, S., BARBE, M.C., LEDUC, C. & DANEAULT, C. Bleaching processes for the production of mechanical and chemi-mechanical pulps of high brightness. (T264) 7:18.
DILABIO, R.A. Experience in upgrading mill waste water treatment plants using pure oxygen. (T412) 10:63.
DION, J.M. See VINCENT, J.-P.
DIONNE, P.-Y. See DANEAULT, C.
DOBSON, P.H. FMRC cable fire testing: Present/future. (T520) 12:129.
DORICA, J. See PALEOLOGOU, M.
DORRIS, G.M. Oxidation of white liquor in the presence of lime mud. (T394) 10:44.
DOUGLAS, M.A. See LATVA-SOMPPI, J.
DUGARD, L. See VINCENT, J.-P.
DUMONT, G.A. See ELNAGGAR, A.
DUMONT, I. See FLUET, A.
DUMONT, I., FLUET, A., GIASSON, J. & SHEPPERD, P. Two applications of hydrosulphite dye-stripping in paper recycling: Yellow directory and colored ledger. (T527) 12:136.
DUPUIS, M. See BALL, J.
DUROCHER, M. See PERRAULT, J.

EACHUS, S.W. See GRIGGS, B.F.
EASTON, C. See LUTHE, C.
EGENES, T.H. & HELLE, T. Transport and drainage processes in a screw press. (T65) 2:38.
ELNAGGAR, A., DUMONT, G.A. & ELSHAFEI, A.L. Adaptive control with direct delay estimation. (T149) 4:35.
ELSHAFEI, A.L. See ELNAGGAR, A.
ENGSTROM, J. See KARNA, A.
ERICSSON, H.M. The Valmet Winbelt winders of the Holmen Paper AB, Hallsta paper mill, Sweden. (T259) 6:70.

FENTON, M.J. See KURIYCHUK, M.G.
FERGUSON, L.D. & McBRIDE, D.H. De-inking sorted office waste. (T89) 2:62.
FINCH, K.W. See RANTANEN, R.
FINK, R., DAVIS, K. & PARISIAN, J. Pre-calendering: Operating experience on newsprint. (T59) 2:31.
FLUET, A., DUMONT, I. & BÉLIVEAU, D. Sodium hydrosulphite brightening: Laboratory versus mill results. (T316) 8:37.
FLUET, A. See DUMONT, I.
FOESSEL, A.D. See GUESALAGA, A.R.
FROMSON, D.A. & LESLIE, B. Implementation of new technology at Meadow Lake: A successful case study. (T26) 1:45.
FUJISAKI, A., TAKATSUKA, H., YAMAMURA, M. World's largest high pressure and temperature recovery boiler. (T452) 11:46.

GAMMON, T. See WAMSLEY, J.H.
GARTSHORE, I. See TSE, D.
GIASSON, J. See DUMONT, I.
GOTTSCHING, L. See ACKERMANN, C.
GOUGH, B., KAY, J. & SEEBACH, G. Adaptive control applications in pulp and paper. (T241) 6:51.
GOWDY, K.M. See NESTMANN, E.R.
GRANT, J. See BLAIN, T.
GREEN, P.E.J. Linking quality, safety and environemntal protection. (T178) 5:35.
GREEN, R. Cleaning the clothing on paper machines that use 100% recycled fibre. 3:16.
GRENGG, M. See KAPPEL, J.
GRIGGS, B.F., EACHUS, S.W. & JOSEPH, J.C. Modification of high-consistency oxygen delignification for enhanced performance. (T351) 9:48.
GUENETTE, M. See TOLAN, J.S.
GUESALAGA, A.R., FOESSEL, A.D., KROPHOLLER, H.W. & RODRIGUEZ, F. On-line measurement of paper shrinkage for monitoring & quality control. (T282) 7:36.
GUNN, I. See BALL, J.

HACHE, M.J.A., BRUNGARDT, J.R., MUNROE, D.C. & TEODORESCU, G. The color-stripping of office wastepaper with sodium hydrosulphite. (T511) 12:120.
HAGEN, W. See VINCENT, J.-P.
HAGGMAN, B.C. & BIALKOWSKI, W.L. Performance of common feedback regulators for first-order and deadtime dynamics. (T160) 4:46.
HAGGMAN, B.C. See BIALKOWSKI, W.L.
HAMILTON, J. See JEAN, P.
HARRIS, T.J. See DESBOROUGH, L.D.
HARVEY, D.M. New opportunities for supervisory process control. (T250) 6:61.
HATTON, J.V. & JOHAL, S.S. Mechanical and chemithermomechanical pulps from second-growth Canadian softwoods. (T460) 12:67
HEATH, W.P. See WELLSTEAD, P.E.
HEINTZE, H.U., RAVARY, R.E. & VAN WAGNER, J.S. Wet pick testing. (T22) 1:41.

KEY TO ARTICLES IN VOLUME 95 FOR 1994

Authors

ACKERMANN, C., PUTZ, H.-J. & GOTTSCHING, L. Deinkability of waterborne flexo inks by flotation. (T307) 8:28.
ADLER, L.S. Automated tuning technique applied to paper machine cross directional control. (T425) 11:20.
ALÉN, R. See VAN HEININGEN, A.R.P.
ALLEN, L.H. See CLAS, S-D.
ANGELL, L.-G. See JANIGAN, D.
ARPIAINEN, V.T. See VAN HEININGEN, A.R.P.
ARSENAULT, F. See STUART, P.R.
ATHER, N. See PRIDHAM, N.F.
AZARNIOUCH, M.K. See CLOUTIER, J.-N.
AZARNIOUCH, M.K. See PALEOLOGOU, M.
AZZI, D. & KROPHOLLER, H.W. Accurate control of temperature and humidity. (T533) 12:142.

BACKMAN, R.C., SIINO, F.J. & KARPOWICZ, C. The performance of jet aeration and mixing technology in activated sludge processes. (T391) 10:41.
BACKSTROM, C. See NIEMI, A.J.
BAILEY, J. The world of pulp and paper at your fingertips. 1:61.
BAILEY, J. Tripap makes a go of CPFP's old Trois-Rivières mill. 9:15.
BAILEY, J. Mill waters get the treatment. 10:15.
BAILEY, J. Top Picks. 11.10.
BAILEY, J. Printing and Graphic Arts meeting draws a diverse crowd. 12:11
BALL, J., DAWSON, I., GUNN, I., DUPUIS, M. & LYNN, W. On-line identification of digester model coefficients and transport lag. (T33) 1:52.
BARBE, M.C. See DESSUREAULT, S.
BARHAM, D. See LATVA-SOMPPI, J.
BARNET, A.J. 19TH Annual Leask Survey: Refiner capacity now stands at 95 470 tonnes a day. A. J. Barnet. 3:12.
BÉLIVEAU, D. See FLUET, A.
BENTLEY, R.G., SCUDAMORE, P. & JACK, J.S. A comparison between fibre length measurement methods. (T155) 4:41.
BERRY, R.M. See PALEOLOGOU, M.
BIALKOWSKI, W.I. See HAGGMAN, B.C.
BIALKOWSKI, W.L., HAGGMAN, B.C. & MILLETTE, S.K. Pulp and paper process control training since 1984. (T182) 5:39.
BLAIN, T., & GRANT, J. ONP re-use without deinking: Short sequence recycling. (T186) 5:43.
BORCHARDT, J.K. & MATALAMAKI, D.W. Newsprint deinking: Unit operations studies of flotation-wash deinking. (T374) 10:24.
BOUCHARD, D.C. & CROTOGINO, R.H. From dreams towards reality: Efforts and achievements reviewed at Control Systems '94. 10:11.
BOUCHER, G. & PIKULIK, I.I. Survey of additives for papers containing mechanical pulp. (T287) 7:41.
BOUREE, G.R. See PRYKE, D.C.
BRAUER, P. See KAPPEL, J.
BRUNGARDT, J.R. See HACHE, M.J.A.

CALLENDER, D. See CLOUTIER, J.-N.
CHEN, S. See OOSTHUIZEN, P.H.
CHRISTENSEN, T. See MICHAELSON, R.
CHUTE, J.R. Pulp and paper maintenance for today and tomorrow: What you really need to know. (T71) 2:44.
CLARKE, S.J. & SINGBEIL, D.L. Corrosion of titanium in alkaline peroxide bleaching media. (T417) 10:70.
CLAS, S-D. & ALLEN, L.H. Comparison of the performances of water- and oil-based defoamers. (T14) 1:33.
CLOUTIER, J.-N., AZARNIOUCH, M.K. & CALLENDER, D. Electrolysis of weak black liquor: Part III: Continuous operation test and system design considerations. (T210) 5:68.
CLOUTIER, J.-N. See PALEOLOGOU, M.
CLUETT, W.R. Process control education: An academic perspective. (T37) 1:57.
COLIN, P. See SERRES, A.
CORT, J.B. See SABOURIN, M.J.
COSSETTE, C. See JANIGAN, D.
CROMEY, S.D. Power management - a critical part of total plant management. (T436) 11:30.
CROSS, L. See KONING, A.F.
CROTOGINO, R.H. See BOUCHARD, D.C.
CUNNINGTON, R.W. See PETERS, N.
CUTTS, M.M. Project: The latest in single jet shower technology. (T355) 9:52.

DAHLQUIST, E. & JACOBS, R. Development of a dry black liquor gasification process.
DANEAULT, C., ROBERT, S. & DIONNE, P.-Y. Groundwood post-refining hydrosulphite bleaching. (T277) 7:31.
DANEAULT, C. See DESSUREAULT, S.
DANBY, R. The impact of forming fabric structures on print quality. (T29) 1:48.
DAVIS, K. See FINK, R.
DAWSON, I. See BALL, J.
DAYAL, B.S., MacGREGOR, J.F., TAYLOR, P.A., KILDAW, R. & MARCIKIC, S. Application of feedforward neural networks and partial least squares regression for modelling Kappa number in a continuous Kamyr digester. (T7) 1:26.
DESBOROUGH, L.D. & HARRIS, T.J. Control performance assessment. (T441) 11:35.
DESSUREAULT, S., LAFRENIERE, S., BARBE, M.C., LEDUC, C. & DANEAULT, C. Bleaching processes for the production of mechanical and chemi-mechanical pulps of high brightness. (T264) 7:18.
DILABIO, R.A. Experience in upgrading mill waste water treatment plants using pure oxygen. (T412) 10:63.
DION, J.M. See VINCENT, J.-P.
DIONNE, P.-Y. See DANEAULT, C.
DOBSON, P.H. FMRC cable fire testing: Present/future. (T520) 12:129.
DORICA, J. See PALEOLOGOU, M.
DORRIS, G.M. Oxidation of white liquor in the presence of lime mud. (T394) 10:44.
DOUGLAS, M.A. See LATVA-SOMPPI, J.
DUGARD, L. See VINCENT, J.-P.
DUMONT, G.A. See ELNAGGAR, A.
DUMONT, I. See FLUET, A.
DUMONT, I., FLUET, A., GIASSON, J. & SHEPPERD, P. Two applications of hydrosulphite dye-stripping in paper recycling: Yellow directory and colored ledger. (T527) 12:136.
DUPUIS, M. See BALL, J.
DUROCHER, M. See PERRAULT, J.

EACHUS, S.W. See GRIGGS, B.F.
EASTON, C. See LUTHE, C.
EGENES, T.H. & HELLE, T. Transport and drainage processes in a screw press. (T65) 2:38.
ELNAGGAR, A., DUMONT, G.A. & ELSHAFEI, A.L. Adaptive control with direct delay estimation. (T149) 4:35.
ELSHAFEI, A.L. See ELNAGGAR, A.
ENGSTROM, J. See KARNA, A.
ERICSSON, H.M. The Valmet Winbelt winders of the Holmen Paper AB, Hallsta paper mill, Sweden. (T259) 6:70.

FENTON, M.J. See KURIYCHUK, M.G.
FERGUSON, L.D. & McBRIDE, D.H. De-inking sorted office waste. (T89) 2:62.
FINCH, K.W. See RANTANEN, R.
FINK, R., DAVIS, K. & PARISIAN, J. Pre-calendering: Operating experience on newsprint. (T59) 2:31.
FLUET, A., DUMONT, I. & BÉLIVEAU, D. Sodium hydrosulphite brightening: Laboratory versus mill results. (T316) 8:37.
FLUET, A. See DUMONT, I.
FOESSEL, A.D. See GUESALAGA, A.R.
FROMSON, D.A. & LESLIE, B. Implementation of new technology at Meadow Lake: A successful case study. (T26) 1:45.
FUJISAKI, A., TAKATSUKA, H., YAMAMURA, M. World's largest high pressure and temperature recovery boiler. (T452) 11:46.

GAMMON, T. See WAMSLEY, J.H.
GARTSHORE, I. See TSE, D.
GIASSON, J. See DUMONT, I.
GOTTSCHING, L. See ACKERMANN, C.
GOUGH, B., KAY, J. & SEEBACH, G. Adaptive control applications in pulp and paper. (T241) 6:51.
GOWDY, K.M. See NESTMANN, E.R.
GRANT, J. See BLAIN, T.
GREEN, P.E.J. Linking quality, safety and environemntal protection. (T178) 5:35.
GREEN, R. Cleaning the clothing on paper machines that use 100% recycled fibre. 3:16.
GRENGG, M. See KAPPEL, J.
GRIGGS, B.F., EACHUS, S.W. & JOSEPH, J.C. Modification of high-consistency oxygen delignification for enhanced performance. (T351) 9:48.
GUENETTE, M. See TOLAN, J.S.
GUESALAGA, A.R., FOESSEL, A.D., KROPHOLLER, H.W. & RODRIGUEZ, F. On-line measurement of paper shrinkage for monitoring & quality control. (T282) 7:36.
GUNN, I. See BALL, J.

HACHE, M.J.A., BRUNGARDT, J.R., MUNROE, D.C. & TEODORESCU, G. The color-stripping of office wastepaper with sodium hydrosulphite. (T511) 12:120.
HAGEN, W. See VINCENT, J.-P.
HAGGMAN, B.C. & BIALKOWSKI, W.L. Performance of common feedback regulators for first-order and deadtime dynamics. (T160) 4:46.
HAGGMAN, B.C. See BIALKOWSKI, W.L.
HAMILTON, J. See JEAN, P.
HARRIS, T.J. See DESBOROUGH, L.D.
HARVEY, D.M. New opportunities for supervisory process control. (T250) 6:61.
HATTON, J.V. & JOHAL, S.S. Mechanical and chemithermomechanical pulps from second-growth Canadian softwoods. (T460) 12:67
HEATH, W.P. See WELLSTEAD, P.E.
HEINTZE, H.U., RAVARY, R.E. & VAN WAGNER, J.S. Wet pick testing. (T22) 1:41.

HEINTZE, H.U. & RAVARY, R.E. An economical means to measure and characterize lint. (T237) 6:47.
HELLE, T. See EGENES, T.H.
HENRIKSSON, C. See HO, T.
HILDEN, K. See VYSE, B.
HO, T. & HENRIKSSON, C. Improvement of product uniformity using statistical process control (SPC) in a BCTMP mill. (T18) 1:37.
HORNER, R.J. & PATERSON, D.H. The Technical Section's 79th year in review. 3:20
HORNER, R.J. Technical competence. 3:33
HUNTER, B., TALLMAN, J., McMEEKIN, R. & SCOTT, S. Integrating a training simulator and a traditional training program at James River-Marathon. (T124) 3:73.

JACK, J.S. See BENTLEY, R.G.
JACOBS, R. See DAHLQUIST, E.
JANIGAN, D.M COSSETTE, C. & ANGELL, L.-G. Board mill conversion to alkaline process. (T407) 10:58.
JARDINE, C.N. Energy savings using fine bubble diffuser technology. (T541) 12:150.
JARVIS, N. Repulpable adhesives: Current status. (T43) 1:70.
JEAN, P., HAMILTON, J. & SENIOR, D.J. Mill trial experience with xylanase: AOX and chemical reductions. (T517) 12:126.
JEAN, P. Kraft pulp bleaching without chlorine. (T544) 12:153.
JOHAL, S.S. See HATTON, J.V.
JOHANSSON, K. See WACKERBERG, E.
JOHANSSON, K. See MICHAELSON, R.
JOSEPH, J.C. See GRIGGS, B.F.

KAPPEL, J., GRENGG, M. & BRAUER. High-consistency bleaching technology for TCF pulps. (T1) 1:20.
KARNA, A., ENGSTROM, J. Recycling life cycle analysis of newsprint: A European view. (T444) 11:38.
KARPOWICZ, C. See BACKMAN, R.C.
KAY, J. See GOUGH, B.
KENNY, R. International environment conference focuses on cooperation. 6:9.KENNY, R., YAMPOLSKY, M. VOLSKY, O. & NAUMOV, A. A general review of Russian pulp and paper effluent treatment technology. (T497) 12:105.
KILBACK, A. See LUTHE, C.
KILDAW, R. See DAYAL, B.S.
KING, J. See VYSE, B.
KIVIRANTA, A. The role of table activity in fourdrinier forming. (T202) 5:60.
KLOFTA, J.L. & MILLER, M.L. Effects of deinking on the recycle potential of papermaking fibres. (T320) 8:41.
KONING, A.F., CROSS, L., SIKES, J.E.G. & TURK, O. From conception to resolution: Effluent treatment upgrade at Alberni Pulp & Paper to meet special quality regulations. (T506) 12:114.
KORAN, Z. New parameters derived from Bauer-McNett classification data. 10:21.
KOIVO, H.N. See RANTALA, T.
KOVACS, T.G. See O'CONNOR, B.I.
KOVACS, T.G. See MARTEL, P.H.
KROPHOLLER, H.W. See GUESALAGA, A.R.
KROPHOLLER, H.W. See AZZI, D.
KUHN, D.C.S. See OOSTHUIZEN, P.H.
KURIYCHUK, M.G. & FENTON, M.J. Electrical energy management initiatives at the Avenor Thunder Bay and Dryden mills. (T329) 8:50.
KYYTSONEN, M. Optireel: A new reeling concept. (T226) 6:35.

LAFRENIERE, S. See DESSUREAULT, S.
LAGACÉ, P. See STUART, P.R.
LASCAR, A. See SERRES, A.
LATVA-SOMPPI, J., TRAN, H.N., BARHAM, D. & DOUGLAS, M.A. Characterization of deinking sludge and its ashed residue. (T381) 10:31.
LAW, K.N. & VALADE, J.L. Production of new grades of mechanical pulp. (T137) 4:23.
LEBEAU, B. See VINCENT, J.-P.
LEDUC, C. See DESSUREAULT, S.
LEE, L. Gas infrared drying: Updateon technology. (T494) 12:102.
LESLIE, B. See FROMSON, D.A.
LIARD, A.C. Review of leachate and ground water quality at three kraft mill landfills. (T550) 12:161.
LIDEN, J. & SJODIN, H. Optimum causticizing efficiency requires precise control of both dry solids and lime mud flow to the lime kiln: Results from a mill study. (T49) 2:21
LING, T.F. The effects of surface properties on stickies removal by flotation. (T501) 12:109.
LINTON, J.W., ROBB, G.A. & ROBB, C.A. High temperature heat pumps and pulp and paper mill applications. (T83) 2:56.
LUNDE, G.G. See MICHAELSON, R.
LUNDMAN, G. See MICHAELSON, R.
LUTHE, C., RICHARDSON, B., EASTON, C., KILBACK, A. & STRECHENIUK, B. Dioxins from mill combustion processes: Minimizing their impact on effluent discharges. (T481) 12:88.
LYNN, W.B. Conductivity sensors for slaker control: Operating experience. (T273) 7:27.
LYNN, W. See BALL, J.
LYONNAIS, C. Complete results, Safest Mill in Canada Contest 1993. 3:36.

MA, R. Floating roof for chlorine dioxide storage tank. (T129) 3:79.
MacGREGOR, J.F. See DAYAL, B.S.
MACKAY, R.C. Routine pump maintenance: Is it all necessary? (T45) 1:73.
MAH, T., REID, F., REYNOLDS, J. & YAU, A. Contaminants encountered in washing and flotation deinking processes. (T166) 4:52.
MARCIKIC, S. See DAYAL, B.S.
MARCOTTE, N. See ADLER, L.S.
MARKOVIC, C.M. See ULOTH, V.C.
MARTEL, P.H. See O'CONNOR, B.I.
MARTEL, P.H., KOVACS, T.G. O'CONNOR, B.I. & VOSS, R.H. Technical Summary: A survey of pulp and paper mill effluents for their potential to induce mixed function oxidase enxyme activity in fish. 11:34.
MATALAMAKI, D.W. See BORCHARDT, J.K.
McBRIDE, D.H. See FERGUSON, L.D.
McCUBBIN, N. Environment dominates at TAPPI pulping. 1:78.
McCUBBIN, N. Proposed air emission standards for US mills. 2:67.
McCUBBIN, N. New in word processing. 3:83.
McCUBBIN, N. A bleaching revolution is in progress. 4:12.
McCubbin, N. Current developments. 4:61.
McCUBBIN, N. OLE! 5:78.
McCUBBIN, N. Upgrading system software. 6:75.
McCUBBIN, N. Speeding up your computer. 7:49
McCUBBIN, N. One up for Canada. 8:54.
McCUBBIN, N. Spreadsheet upgrades. 9:71.
McCUBBIN, N. A new communications standard? 10:75.
McCUBBIN, N. Advances in data communication. 11:54.
McCUBBIN, N. When and why to use your computer for communications. 12:170
McELHATTON, K. The outlook for the Canadian pulp and paper industry in 1994. 3:39.
McMEEKIN, R. See HUNTER, B.
McMEEKIN, R. See OWEN, L.
MICHAELSON, R., CHRISTENSEN, T., LUNDE, G.G., LUNDMAN, G. & JOHANSSON, K. Model predictive control of a continuous Kamyr digester at SCA-Nordliner, Munksund, Sweden. (T537) 12:146
MICKOWSKI, C. See PRYKE, D.C.
MILLER, M.L. See KLOFTA, J.L.
MILLETTE, S.K. See BIALKOWSKI, W.L.
MORIMANNO, L.R. Chemical felt conditioning in recycling newsprint mills. (T342) 9:39.
MORTON, W. See SHEWCHUK, C.F.
MUNKITTRICK, K.R. & VAN DER KRAAK, G.J. Receiving water environmental effects associated with discharges from Ontario pulp mills. (T199) 5:57.
MUNROE, D.C. See HACHE, M.J.A.
MURPHY, L. From ISO-9003 to Q-9001-1991: A quantum leap. (T41) 1:64.
MUSSELMAN, R.L. See SABOURIN, M.J.
MUSTONEN, H. & RITALA, R. Co-ordination of cross direction control. (T120) 3:69.

NAUMOV, A. See KENNY, R.
NESTMANN, E.R., GOWDY, K.M., ROEST, N.M. & REEVE, D.W. The safety of chlorine-bleached paper products. (T133) 4:19.
NGUYEN, X.T. See SHARIFF, A.
NGUYEN-MINH, T. See VINCENT, J.-P.
NIEMI, A.J. & BACKSTROM, C. Automatic observation of dry line on wire for wet end control of the paper machine. (T55) 2:27.

O'CONNOR, B.I., KOVACS, T.G., VOSS, R.H., MARTEL, P.H. & VAN LIEROP, B. A laboratory assessment of the environmental quality of alternative pulp bleaching effluents. (T99) 3:47.
O'CONNOR, B.I. See MARTEL, P.H.
ODENDAHL, S. Environmental protection and consumer demands: A review of trends and impacts. (T144) 4:30.
OLESZKIEWICZ, J.A. See WEEKS, B.
OOSTHUIZEN, P.H., CHEN, S., KUHN, D.C.S. & WHITING, P. Fluid and fibre flow near a wall slot in a channel. (T174) 5:27.
OUELLET, J. Estivale 1994: Environment receives secondary treatment. 7:9.
OWEN, L., McMEEKIN, R. & SCOTT, S. Six steps to purchasing a training simulator. (T254) 6:65.

PAGE, D. Demand for permanent paper comes from many sources. 2:10.
PALEOLOGOU, M., CLOUTIER, J.-N. RAMAMURTHY, P., BERRY, R.M. AZARNIOUCH, M.K. & DORICA, J. Membrane technologies for pulp and paper applications. (T386) 10:36.
PARISIAN, J. See FINK, R.
PARKER, S.D. Freeness testing: A new approach. (T53) 2:25.
PARSONS, C. Thermal energy conservation program. (T364) 9:61.
PATERSON, D.H. See HORNER, R.J.
PERRAULT, J. & DUROCHER, M. Granite roll wear and barring: The Domtar Windsor experience. (T346) 9:43.
PETERS, N. & CUNNINGTON R.W. Power consumption and AOX: What's going to happen in Canada? 5:11.
PETERS, N. Energy audits in mills. (T554) 12:165.
PICCIONE, J. Environmental pressures affect demand and pricing for bleaching chemicals. 1:9.
PIKULIK, I.I. Séchage du papier à haute intensité. (T109) 3:57.
PIKULIK, I.I. See BOUCHER, G.
PONKAMO, J. Identification systems in roll finishing. (T62) 2:34.
PRIDHAM, N.F. & ATHER, N. A 15-MW load shift through TMP pulp storage. (T477) 12:84.
PRYKE, D.C., WINTER, P., BOUREE, G.R. & MICKOWSKI, C. The impact of chlorine dioxide delignification on pulp manufacture and effluent characteristics at Grande Prairie, AB. (T230) 6:40.
PUTZ, H.-J. Deinkability of waterborne flexo inks by flotation. (T307) 8:28.

RAMAMURTHY, P. See PALEOLOGOU, M.
RANTALA, T., TARHONEN, P. & KOIVO, H.N. Adaptive retention control in a paper machine. (T299) 8:20.
RANTANEN, R. & FINCH, K.W. Production proven capabilities in sym-sizer pigmenting. (T370) 9:67.
RAO, M. See XIA, Q.
RAVARY, R.E. See HEINTZE, H.U.
REEVE, D.W. See NESTMANN, E.R.
REID, F. See MAH, T.
REYNOLDS, J. See MAH, T.
RICHARDSON, B. See LUTHE, C.
RITALA, R. See MUSTONEN, H.
ROBB, C.A. See LINTON, J.W.
ROBB, G.A. See LINTON, J.W.
ROBERT, S. See DANEAULT, C.
RODDEN, G. Meeting new effluent standards is the focus for the next year. 6:13.
RODDEN, G. The times they are a changin'. 7:11.
RODDEN, G. Cascades turns 30 and is on the acquisition trail gain. 7:15.
RODDEN, G. Harmac Pacific's bugs thrive on effluent. 8:9.

RODDEN, G. Is the tide going out on the sea of red ink? 9:11.
RODDEN, G. On the road to TCF pulp. 9:21.
RODDEN, G. Hopes are high for the CPPA'S PaperWeek International in 1995. 11:8.
RODDEN, G. Whither Woodyards? 11:14.
RODDEN, G. Competitiveness will be the force that drives Canada's pulp and paper industry. 12:17.
RODDEN, G. TS, CPPA shares its knowledge. 12:21
RODRIGUES, F. See GUESALAGA, A.R.
ROEST, N.M. See NESTMANN, E.R.

SABOURIN, M.J., CORT, J.B. & MUSSELMAN, R.L. High-speed double-disc TMP from northern and southern softwoods...One or two refining stages? (T400) 10:51.
SALCUDEAN, M. See TSE, D.
SAMS, J.L. Proven technology for recovery boiler flue gas scrubbers. (T433) 11:27.
SCHONMEIER, H.-P. TRILLING. A system for relieving nip loads of rewinding rolls on shaftless two-drum winders. (T422) 11:17.
SCOTT, S. See HUNTER, B.
SCOTT, S. See OWEN, L.
SCUDAMORE, P. See BENTLEY, R.G.
SEEBACH, G. See GOUGH, B.
SENIOR, D.J. See JEAN, P.
SERRES, A., COLIN, P. & LASCAR, A. A speck removal index and a speck detachment index for flotation de-inking. (T117) 3:66.
SHARIFF, A. & NGUYEN, X.T. Effect of consistency on chlorinated dioxin and furan formation during high substitution pre-bleaching to constant E1 Kappa number. (T303) 8:24.
SHAW, D.S. The forest industries R&D and innovation program. (T215) 5:73.
SHEN, X. See XIA, Q.
SHEPPERD, P. See DUMONT, I.
SHEWCHUK, C.F. & MORTON, W. The evolution of an on-line model-based optimization system. (T220) 6:29.
SIINO, F.J. See BACKMAN, R.C.
SIKES, J.E.G. See KONING, A.F.
SINGBEIL, D.L. See CLARKE, S.J.
SINGBEIL, D.L. Corrosion of generating bank tubes in kraft recovery boilers. (T523) 12:132.
JODIN, H. See LIDEN, J.
STEVENSON, S.M. Asset renewal program is well under way at Skookumchuck. 2:15.
STEVENSON, S.M. Guarded optimism is one positive result of PaperWeek 1994. 3:18.
STEVENSON, S.M. Winning gadgets from coast to coast. 3:32
STEVENSON, S.M. At MB's Port Alberni effluent takes a split treatment route. 5:20
STRECHENIUK, B. See LUTHE, C.
STUART, P.R., LAGACÉ, P., ARSENAULT, F.& ZALOUM, R. Pilot trials using a trickling filter to treat a TMP newsprint mill effluent. (T467) 12:74.

TAKATSUKA, H. See FUJISAKI, A.
TALLMAN, J. See HUNTER, B.
TARHONEN, P. See RANTALA, T.
TAYLOR, P.A. See DAYAL, B.S.
TAYLOR, G. The role of control valves in process performance. (T473) 12:80.
TEODORESCU, G. See HACHE, M.J.A.
THEW, R.W.C. IVIC: A novel approach to non-condensable gas handling. (T94) 3:42.
THIBAULT, L. See TOLAN, J.S.
TIIKKAJA, E. Experiences with a new on-line fibre-length analyzer. (T207) 5:65.
TOLAN, J.S., GUENETTE, M., THIBAULT, L. & WINSTANLEY, C. The use of a novel enzyme treatment to improve the efficiency of shive removal by bleaching. (T488) 12:96.
TRAN, H.N. See LATVA-SOMPPI, J.
TREPANIER, R.J. Novel high resolution image analysis for measuring residual ink in pulp, paper and board. (T547) 12:156.
TRILLING, H.-P. See SCHONMEIER, H.
TSE, D., SALCUDEAN, M. & GARTSHORE, I. Multiple jet interaction with relevance to recovery boiler flow fields. (T79) 2:52.
TURK, O. See KONING, A.F.

ULOTH, V.C., MARKOVIC, C.M. & WALSH, A. Monitoring of recovery fouling and plugging using furnace draft loss. (T244) 6:54.

VALADE, J.L. See LAW, K.N.
VAN DER KRAAK, G.J. See MUNKITTRICK, K.R.
VAN HEININGEN, A.R.P., ARPIAINEN, V.T. & ALÉN, R. Effect of liquor type and pyrolysis rate on the steam gasification reactivities of black liquors. (T358) 9:55.
VAN LIEROP, B. See O'CONNOR, B.I.
VAN WAGNER, J.S. See HEINTZE, H.U.
VINCENT, J.-P., NGUYEN-MINH, T., HAGEN, W., LEBEAU, B., DION, J.M. & DUGARD, L. Advanced control strategies for the dyeing of white and colored papers. (T337) 9:34.
VOLSKY, O. See KENNY, R.
VOSS, R.H. See O'CONNOR, B.I.
VOSS, R.H. See MARTEL, P.H.
VYSE, B., KING, J. & HILDEN, K. CD caliper control on soft nip calenders. (T333) 9:28

WACKERBERG, E., JOHANSSON, K. & WALLIN, S. Microparticle technology in clayfilled groundwood specialty printing grades produced under neutral or alkaline conditions. (T290) 7:44.
WAECH, T.G. Newsprint curl induced by offset printing. (T324) 8:45.
WALLIN. See WACKERBERG, E.
WALSH, A. See ULOTH, V.C.
WAMSLEY, J.H. & GAMMON, T. New water-based defoamers offer improved performance as well as environmental advantages.
WARNQVIST, B. Char bed and smelt properties mill studies. (T313) 8:34.
WEEKS, B., OLESZKIEWICZ, J.A. Shock loading lagoons and activated sludge treating bleached kraft mill wastewater. (T295) 8:15.
WELLSTEAD, P.E. & HEATH, W.P. Two-dimensional control systems: Application to the CD and MD control problem. (T75) 2:48.
WHITING, P. See OOSTHUIZEN, P.H.
WILLIAMSON, P.N. Paper physics symposium emphasizes the importance of researching the literature. 1:16.
WILLIAMSON, P.N. Concert industries in tune with specialized markets. 3:9.
WILLIAMSON, P.N. Screening and cleaning technology is being improved all the time. 4:9.
WILLIAMSON, P.N. Maintenance of business gets top priority to keep mills running. 5:15.
WINSTANLEY, C. See TOLAN, J.S.
WINTER, P. See PRYKE, D.C.
WONG, P.M. Secondary waste treatment system CP Forest Thunder Bay mill. (T170) 4:57.

XIA, Q., RAO, M., SHEN, X. & ZHU, H. Adaptive control of a paperboard machine. (T194) 5:51.

YAMAMURA, M. See FUJISAKI, A.
YAMPOLSKY, M. See KENNY, R.
YAU, A. See MAH, T.

ZALOUM, R. See STUART, P.R.
ZHU, H. See XIA, Q.

Subject

ACCURATE CONTROL of temperature and humidity. D. Azzi et al. (T533) 12:142.
ADAPTIVE CONTROL with direct delay estimation. A. Elnaggar et al. (T149) 4:35.
ADAPTIVE CONTROL of a paperboard machine. Q. Xia et al. (T194) 5:51.
ADAPTIVE CONTROL applications in pulp and paper. B. Gough et al. (T241) 6:51.
ADAPTIVE RETENTION control in a paper machine. T. Rantala et al. (T299) 8:20.
ADDITIVES. Survey of additives for papers containing mechanical pulp. G. Boucher et al. (T287) 7:41.
ADVANCED control strategies for the dyeing of white and colored papers. J.-P. Vincent et al. (T337) 9:34.
ADVANCES in data communication. N. McCubbin. 11:54.
AIR-LAID PAPERS. Concert industries in tune with specialized markets. P.N. Williamson. 3:9.
ALKALINE BOARDMAKING. Board mill conversion to alkaline process. D. Janigan et al. (T407) 10:58.
ANNIVERSARY. Cascades turns 30 and is on the acquisition trail again. G. Rodden. 7:15.
APPLICATION of feedforward neural networks and partial least squares regression for modelling Kappa number in a continuous Kamyr digester. B.S. Dayal et al. (T7) 1:26.
ASSET RENEWAL program is well under way at Skookumchuck. S.M. Stevenson. 2:15.
ATMOSPHERE CONTROL. Accurate control of temperature and humidity. D. Azzi et al. (T533) 12:142.
AUTOMATED tunning technique applied to paper machine cross directional control. L.S. Adler et al. (T425) 11:20.
AUTOMATIC observation of dry line on wire for wet end control of the paper machine. A.J. Niemi et al. (T55) 2:27.

BIOBLEACHING. Mill trial experiences with xylanase: AOX and chemical reductions. P. Jean et al. (T517) 12:126.
BLACK LIQUOR RECOVERY. Electrolysis of weak black liquor: Part III: Continuous operation test and system design considerations. J.-N. Cloutier et al. (T210) 5:68.
BLEACHING EFFLUENTS. A laboratory assessment of the environmental quality of alternative pulp bleaching effluents. B.I. O'Connor et al. (T99) 3:47.
BLEACHING PROCESSES for the production of mechanical and chemi-mechanical pulps of high brightness. S. Dessureault et al. (T264) 7:18.
BLEACHING revolution is in progress. N. McCubbin. 4:12.
BLEACHING. Sodium hydrosulphite brightening: Laboratory versus mill results. A. Fluet et al. (T316) 8:37.
BOARD MILL conversion to alkaline process. D. Janigan et al. (T407) 10:58.

CALENDERING. Pre-calendering: operating experience on newsprint. R. Fink et al. (T59) 2:31.
CALENDERING. CD caliper control on soft NIP calenders. B. Vyse et al. (T333) 9:28.
CAPITAL SPENDING. Meeting new effluent standards is the focus for the next year. G. Rodden. 6:13.
CASCADES turns 30 and is on the acquisition trail again. G. Rodden. 7:15.
CAUSTICITY. Conductivity sensors for slaker control: Operating experience. W.B. Lynn. (T273) 7:27.
CD caliper control on soft nip calenders. B. Vyse et al. (T333) 9:28.
CHARACTERIZATION of deinking sludge and its ashed residue. J. Latva-Somppi et al. (T381) 10:31.
CHAR BED and smelt properties mill studies. B. Warnqvist. (T313) 8:34.
CHEMICAL felt conditioning in recycling newsprint mills. L.R. Morimanno. (T342) 9:39.
CHEMICAL RECOVERY. Multiple jet interaction with relevance to recovery boiler flow fields. D. Tse et al. (T79) 2:52.
CHEMICAL RECOVERY. World's largest high pressure and temperature recovery boiler. A. Fujisaki et al. (T452) 11:46.
CHEMICALS. Environmental pressures affect demand and pricing for bleaching chemicals. J. Piccione. 1:9.
CHLORINE SUBSTITUTION. Kraft pulp bleaching without chlorine. P. Jean. (T544) 12:153.
CLEANING the clothing on paper machines that use 100% recycled fibre. R. Green. 3:16.
COATING. Production proven capabilities in sym-sizer pigmenting. R. Rantanen et al. (T370) 9:67.
COLOR CONTROL. Advanced control strategies for the dyeing of white and colored papers. J.-P. Vincent et al. (T337) 9:34.
COLOR-STRIPPING of office wastepaper with sodium hydrosulphite. M.J.A. Hache et al. (T511) 12:120.
COMPARISON of the performances of water- and oil-based defoamers. S-D. Clas et al. (T14) 1:33.
COMPARISON between fibre length measurement methods. R.G. Bentley et al. (T155) 4:41.
COMPETITIVENESS. Pulp and paper maintenance for today and tomorrow: What you really need to know. J.R. Chute. (T71) 2:44.

COMPETITIVENESS will be the force that drives Canada's pulp and paper industry. G. Rodden. 12:17.
COMPLETE RESULTS, Safest Mill in Canada Contest 1993. C. Lyonnais. 3:36.
CONCERT Industries in tune with specialized markets. P.N. Williamson. 3:9.
CONDUCTIVITY sensors for slaker control: Operating experience. W.B. Lynn. (T273) 7:27.
CONFERENCES
The Fundamental Research Symposium. P.N. Williamson. 1:16.
80th Annual Meeting TS CPPA. S.M. Stevenson. 3:18.
Non Chlorine Bleaching Conference. N. McCubbin. 4:12.
International Environment Conference. R. Kenny. 6:9.
Estivale 1994. J. Ouellet. 7:9
PacWest Conference. G. Rodden. 7:11.
International Pulp Bleaching Conference. G. Rodden. 9:21.
Control Systems '94. D.C. Bouchard et al. 10:11.
PaperWeek Preview. G. Rodden. 11:8.
Printing and Graphics Arts. J. Bailey. 12:11
TS, CPPA shares its knowledge, G. Rodden. 12:21
CONTAMINANTS encountered in washing and flotation deinking processes. T. Mah et al. (T166) 4:52.
CONTROL performance assessment. L.D. Desborough et al. (T441) 11:35.
CONTROL SYSTEMS. Automatic observation of dry line on wire for wet end control of the paper machine. A.J. Niemi et al. (T55) 2:27.
CONTROL SYSTEMS. Two-dimensional control systems: Application to the
CONTROL SYSTEMS. Automated tuning technique applied to paper machine cross directional control. L.S. Adler et al. (T425) 11:20.
CONTROL TRAINING. Pulp and paper process control training since 1984. W.L. Bialkowski et al. (T182) 5:39.
CONTROL VALVES. The role of control valves in process performance. G. Taylor. (T473) 12:80.
CD and MD control problem. P.E. Wellstead et al. (T75) 2:48.
CO-ORDINATION or cross direction control. H. Mustonen et al. (T120) 3:69.
CORROSION of titanium in alkaline peroxide bleaching media. S.J.Clarke et al. (T417) 10:70.
CORROSION of generating bank tubes in kraft recovery boilers. D. Singbeil. (T523) 12:132.
CPPA FORECAST. The outlook for the Canadian pulp and paper industry in 1994. K. McElhatton. 3:39.
CURRENT developments. N. McCubbin. 4:61.

DEFORMATION. Newsprint curl induced by offset printing. T.G. Waech. (T324) 8:45.
DEINKABILITY of waterborne flexo inks by flotation. C. Ackermann et al. (T307) 8:28.
DE-INKING sorted office waste. L.D. Ferguson et al. (T89) 2:62.
DE-INKING. A speck removal index and a speck detachment index for flotation de-inking. A. Serres et al. (T117) 3:66.
DEINKING. Contaminants encountered in washing and flotation deinking processes. T. Mah et al. (T166) 4:52.
DEMAND for permanent paper comes from many sources. D.H. Page. 1:10.
DEVELOPMENT of a dry black liquor gasification process. E. Dahlquist et al. (T73) 2:46.
DEWATERING PULP. Transport and drainage processes in a screw press. T.H. Egenes et al. (T65) 2:38.
DIGESTER CONTROL. Application of feedforward neural networks and partial least squares regression for modelling Kappa number in a continuous Kamyr digester. B.S. Dayal et al. (T7) 1:26.
DIGESTER CONTROL. On-line identification of digester model coefficients and transport lab. J. Ball et al. (T33) 1:52.
DIOXINS AND FURANS. Effect of consistency on chlorinated dioxin and furan formation during high substitution pre-bleaching to constant E1 Kappa number. A. Shariff et al. (T303) 8:24.
DIOXINS from mill combustion processes: Minimizing their impact on effluent discharges. C. Luthe et al. (T481) 12:88.
DRYING/SÉCHAGE. Séchage du papier à haute intensité. I.I. Pikulik. (T109) 3:57.

ECOLOGY. Environmental protection and consumer demands: A review of trends and impacts. S. Odendahl. (T144) 4:30.
ECONOMICAL means to measure and characterize lint. H.U. Heintze et al. (T237) 6:47.
ECONOMICS. Is the tide going out on the sea of red ink? G. Rodden. 9:11.
EDUCATION. Process control education: An academic perspective. W.R. Cluett. (T37) 1:57.
EFFECT of consistency on chlorinated dioxin and furan formation during high substitution pre-bleaching to constant E1 Kappa number. A. Shariff et al. (T303) 8:24.
EFFECT of liquor type and pyrolysis rate on the steam gasification reactivities of black liquors. A.R.P. Van Heiningen et al. (T358) 9:55.
EFFECTS of deinking on the recycle potential of papermaking fibres. J.L. Klofta et al. (T320) 8:31.
EFFECTS of surface properties on stickies removal by flotation. T.F. Ling. (T501) 122:109.
EFFLUENT. Receiving water environmental effects associated with discharges from Ontario pulp mills. K.R. Munkittrick et al. (T199) 5:57.
EFFLUENT TREATMENT. Secondary waste treatment system CP Forest Thunder Bay mill. P.M.Wong. (T170) 4:57.
EFFLUENT TREATMENT. Harmac Pacific's bugs thrive on effluent. G. Rodden. 8:9.
EFFLUENT TREATMENT. The performance of jet aeration and mixing technology in activated sludge processes. R.C. Backman et al. (T391) 10:41.
EFFLUENT TREATMENT. Experience in upgrading mill wastewater treatment plants using pure oxygen. R.A. Dilabio. (T412) 10:63.
EFFLUENT TREATMENT. A general review of Russian pulp and paper effluent treatment technology. R. Kenny et al. (T497) 12:105.
EFFLUENT TREATMENT. Pilot trials using a trickling filter to treat a TMP newsprint mill effluent. P.R. Stuart. (T467) 12:74.
ELECTRICAL energy management initiatives at the Avenor Thunder Bay and Dryden mills. M.G. Kuriychuk et al. (T329) 8:50.
ELECTROLYSIS of weak black liquor: Part III: Continuous operation test and system design considerations. J.-N. Cloutier et al. (T210) 5:68.
ENERGY. Power consumption and AOX: What's going to happen in Canada? N. Peters et al. 5.11.
ENERGY. Electrical energy management initiatives at the Avenor Thunder Bay and Dryden mills. M.G. Kuriychuk et al. (T329) 8:50.
ENERGY AUDITS in mills. N. Peters. (T554) 12:165.
ENERGY CONSERVATION. Energy audits in mills. N. Peters. (T554) 12:165.
ENERGY CONSERVATION. A 15-MW load shift through TMP pulp storage. N.F. Pridham et al. (T477) 12:84.
ENERGY SAVINGS using fine bubble diffuser technology. C.N. Jardine. (T541) 12:150.
ENVIRONMENT dominates at TAPPI pulping. N. McCubbin. 1:78.
ENVIRONMENT. Mill waters get the treatment. J. Bailey. 10:15.
ENVIRONMENT. Review of leachate and ground water quality at three kraft mill landfills. A.C. Liard. (T550) 12:161.
ENVIRONMENTAL pressures affect demand and pricing for bleaching chemicals. J. Piccione. 1:9.
ENVIRONMENTAL protection and consumer demands: A review of trends and impacts. S. Odendahl. (T144) 4:30.
ENZYMES. The use of a novel enzyme treatment to improve the efficiency of shive removal by bleaching. J.S. Tolan et al. (T488) 12:96.
ESTIVALE 1994: Environment receives secondary treatment. J. Ouellet. 7:9.
EVOLUTION of an on-line model-based optimization system. C.F. Shewchuk et al. (T220) 6:29.
EXPERIENCE in up-grading mill wastewater treatment plants using pure oxygen. R.A. Dilabio.(T412) 10:63.
EXPERIENCES with a new on-line fibre-length analyzer. E. Tiikkaja. (T207) 5:65.
EXTENDED CALENDAR. The world of pulp and paper at your fingertips. J. Bailey. 1:61.

FIBRE TESTING. New parameters derived from Bauer-McNett classification data. Z. Koran. 10:21.
FILLERS. Microparticle technology in clayfilled groundwood specialty printing grades produced under neutral or alkaline conditions. E. Wackerberg et al. (T290) 7:44.
FILTRATION. Membrane technologies for pulp and paper applications. M. Paleologou et al. (T386) 10:36.
FINISHING. Optireel: A new reeling concept. M. Kyytsonen. (T226) 6:35.
FIRE PROTECTION. FMRC cable fire testing: Present/future. P.H. Dobson. (T520) 12:129.
15-MW load shift through TMP pulp storage. N.F. Pridham et al. (T477) 12:84.
FLOATING roof for chlorine dioxide storage tank. R. Ma. (T129) 3:79.
FMRC cable fire testing: Present/future. P.H. Dobson. (T520) 12:129.
FOAM INHIBITORS. Comparison of the performances of water- and oil-based defoamers. S-D. Clas et al. (T14) 1:33.
FOAM INHIBITORS. New water-based defoamers offer improved performance as well as environmental advantages. J.H. Wamsley et al. (T190) 5:47.
FOREST INDUSTRIES R&D and innovation program. D.S. Shaw. (T215) 5:73.
FORMATION. The role of table activity in fourdrinier forming. A. Kiviranta. (T202) 5:60.
FREENESS TESTING: A new approach. S.D. Parker. (T53) 2:25.
FIBRE MONITORING. Freeness testing: A new approach. S.D. Parker. (T53) 2:25.
FINISHING. Identification systems in roll finishing. J. Ponkamo. (T62) 2:34.
FINISHING. The Valmet Winbelt winders of the Holmen Paper AB, Hallsta paper mill, Sweden. H.M. Ericsson. (T259) 6:70.
FLUID AND FIBRE flow near a wall slot in a channel. P.H. Oosthuizen et al. (T174) 5:27.
FROM DREAMS towards reality: Efforts and achievements reviewed at Control Systems '94. D.C. Bouchard et al. 10:11.
FROM ISO-9003 to Q-9001-1991: A quantum leap. L. Murphy. (T41) 1:64.
FROM CONCEPTION to resolution: Effluent treatment upgrade at Alberni Pulp & Paper to meet special quality regulations. A.F. Koning et al. (T506) 12:114.

GAS infrared drying: Update on technology. L. Lee. (T494) 12:102.
GENERAL REVIEW of Russian pulp and paper effluent treatment technology. R. Kenny et al. (T497) 12:105.
GRANITE ROLL wear and barring: The Domtar Windsor experience. J. Perrault et al. (T346) 9:43.
GROUNDWOOD post-refining hydrosulphite bleaching. C. Daneault et al. (T277) 7:31.
GUARDED optimism is one positive result of PaperWeek 1994. S.M. Stevenson. 3:18.

HARMAC PACIFIC's bugs thrive on effluent. G. Rodden. 8:9.
HEAT RECOVERY. High temperature heat pumps and pulp and paper mill applications. J.W. Linton et al. (T83) 2:56.
HIGH-CONSISTENCY bleaching technology for TCF pulps. J. Kappel et al. (T1) 1:20.
HIGH-SPEED double-disc TMP from northern and southern softwoods...One or two refining stages? M.J. Sabourin et al. (T400) 10:51.
HIGH TEMPERATURE heat pumps and pulp and paper mill applications. J.W. Linton et al. (T83) 2:56.
HOPES are high for the CPPA's PaperWeek International in 1995. G. Rodden. 11:8.

IDENTIFICATION systems in roll finishing. J. Ponkamo. (T62) 2:34.
IMPACT of forming fabric structures on print quality. R. Danby. (T29) 1:48.
IMPACT of chlorine dioxide delignification on pulp manufacture and effluent characteristics at Grande Prairie, AB. D.C. Pryke et al. (T230) 6:40.
IMPLEMENTATION of new technology at Meadow Lake: A successful case study. D.A. Fromson et al. (T26) 1:45.
IMPROVEMENT of product uniformity using statistical process control (SPC) in a BCTMP mill. T. Ho et al. (T18) 1:37.
INFRARED DRYING. Gas infrared drying: Update on technology. L. Lee. (T494) 12:102.
INTEGRATING a training simulator and a traditional training program at James River-Marathon. B. Hunter et al. (T124) 3:73.
INTERNATIONAL environment conference focuses on cooperation. R. Kenny. 6:9.
IS THE TIDE going out on the sea of red ink? G. Rodden. 9:11.
IVIC: A novel approach to non-condensable gas handling. R.W.C. Thew. (T94) 3:42.

KRAFT PULP bleaching without chlorine. P. Jean. (T544) 12:153.

LABORATORY assessment of the environmental quality of alternative pulp bleaching effluents. B.I. O'Connor et al. (T99) 3:47.
LIME QUALITY. Optimum causticizing efficiency requires precise control of both dry solids and lime mud flow to the lime kiln: Results from a mill study. J. Liden et al. (49) 2:21.
LINKING QUALITY, safety and environmental protection. P.E.J. Green. (T178) 5:35.
LINTING. An economical means to measure and characterize lint. H.U. Heintze et al. (T237) 6:47.

MACHINE CLEANING. Projet: The latest in single jet shower technology. M.M. Cutts. (T355) 9:52.
MAINTENANCE. Routine pump maintenance: Is it all necessary? R.C. Mackay. (T45) 1:73.
MAINTENANCE of business gets top priority to keep mills running. P.N. Williamson. 5:15.
MANAGEMENT. Linking quality, safety and environmental protection. P.E.J. Green. (T178) 5:35.
MB's Port Alberni effluent takes a split treatment route. S.M. Stevenson. 5:20.
MEASUREMENT. A comparison between fibre length measurement methods. R.G. Bentley et al. (T155) 4:41.
MECHANICAL and chemithermomechanical pulps from second-growth softwoods. J.V. Hatton, S.S. Johal (T460) 12:67
MECHANICAL PULPING. 19th Annual Leask Survey: Refiner capacity now stands at 95 470 tonnes a day. 3:12.
MECHANICAL PULPING. Groundwood post-refining hydrosulphite bleaching. C. Daneault et al. (T277) 7:31.
MECHANICAL PULPING. High-speed double-disc TMP from northern and southern softwoods...One or two refining stages? (T400) 10:51.
MEETING new effluent standards is the focus for the next year. G. Rodden. 6:13.
MEMBRANE technologies for pulp and paper applications. M. Paleologou et al. (T386) 10:36.
MICROPARTICLE technology in clayfilled groundwood specialty printing grades produced under neutral or alkaline conditions. E. Wackerberg et al. (T290) 7:44.
MILL MODERNIZATION. Asset renewal program is well under way at Skookumchuck. S.M. Stevenson 1:15.
MILL MODERNIZATION. At MB's Port Alberni effluent takes a split treatment route. S.M. Stevenson. 5:20.
MILL OPENING. Tripap makes a go of CPFP's old Trois-Rivières mill. J. Bailey. 9:15.
MILL TRIAL experiences with xylanase: AOX and chemical reductions. P. Jean et al. (T517) 12:126.
MILL WATERS get the treatment. J. Bailey. 10:15.
MODEL PREDICTIVE control of a continuous Kamyr digester at SCA-Nordliner, Munksund, Sweden. R. Michaelson et al. (T537) 12:146.
MODIFICATION of high-consistency oxygen delignification for enhanced performance. B.F. Griggs et al. (T351) 9:48.
MONITORING of recovery fouling and plugging using furnace draft loss. V.C. Uloth et al. (T244) 6:54.
MULTIPLE jet interaction with relevance to recovery boiler flow fields. D. Tse et al. (T79) 2:52

NEW COMMUNICATIONS standard? N. McCubbin. 10:75.
NEW in word processing. N. McCubbin. 3:83.
19th Annual Leask Survey: Refiner capacity now stands at 95 470 tonnes a day. A.J. Barnet. 3:12.
NEW OPPORTUNITIES for supervisory process control. D.M. Harvey. (T250) 6:61.
NEW PARAMETERS derived from Bauer-McNett classification data. Z. Koran. 10:21.
NEW WATER-BASED defoamers offer improved performance as well as environmental advantages. J.H. Wamsley et al. (T190) 5:47.
NEWSPRINT curl induced by offset printing. T.G. Waech. (T324) 8:45.
NEWSPRINT deinking: Unit operations studies of flotation-wash deinking. J.K. Borchardt et al. (T374) 10:24.
NOVEL high resolution image analysis for measuring residual ink in pulp, paper and board. R.J. Trepanier. (T547) 12:156.

OLE! N. McCubbin. 5:78.
ONE up for Canada. N. McCubbin. 8:54.
ON-LINE identification of digester model coefficients and transport lag. J. Ball et al. (T33) 1:52.
ON-LINE MEASUREMENT. Experiences with a new on-line fibre-length analyzer. E. Tiikkaja. (T207) 5:65.
ON-LINE MEASUREMENT of paper shrinkage for monitoring & quality control. A.R. Guesalaga et al. (T282) 7:36.
ONP re-use without deinking: Short sequence recycling. T. Blain et al. (T186) 5:43.
ON THE ROAD to TCF pulp. G. Rodden. 9:21.
OPTIMUM causticizing efficiency requires precise control of both dry solids and lime mud flow to the lime kiln: Results from a mill study. J. Liden et al. (T49) 2:21.
OPTIREEL: A new reeling concept. M. Kyytsonen. (T226) 6:35.
OUTLOOK for the Canadian pulp and paper industry in 1994. K. McElhatton. 3:39.
OXIDATION of white liquor in the presence of lime mud. G.M. Dorris. (T394) 10:44.
OXYGEN. Oxidation of white liquor in the presence of lime mud. G.M. Dorris. (T394) 10:44.

PAPER AND HEALTH. The safety of chlorine-bleached paper products. E.R. Nestmann et al. (T133) 4:19.
PAPERMAKING. Demand for permanent paper comes from many sources. D.H. Page. 1:10.
PAPER QUALITY. On-line measurement of paper shrinkage for monitoring & quality control. A.R. Guesalaga et al. (T282) 7:36.

TERRA MAT™...
REUSABLE ROAD MATS

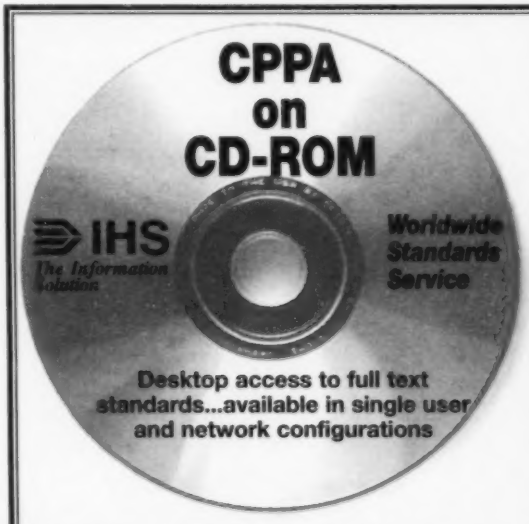
FOR LOGGERS... MADE FROM RECYCLED TRUCK TIRES

• CROSS STREAMS & WETLANDS • USE ON LOG DECKS
• KEEP MUD OFF PAVED ROADS • RUN IN WET WEATHER

terrafix® geosynthetics inc.
FOR MORE INFORMATION CONTACT
425 Attwell Dr., Rexdale, Ont. M9W 5C4
Tel.: (416) 674-0363 • Fax (416) 674-1159

Circle Reader Service No. 172

CPPA on CD-ROM



Desktop access to full text standards...available in single user and network configurations

Information Handling Services is the world's largest provider of technical and regulatory documents. CPPA on CD-ROM is the latest addition to our collection of over 400 Industry and International Standards.

For more details on CPPA and our family of CD-ROM products and services call toll free
1-800-387-4408

Circle Reader Service No. 173

PAPER PHYSICS symposium emphasizes the importance of researching the literature. P.N. Williamson 1:16.
PAPERWEEK PREVIEW. Hopes are high for the CPPA's PaperWeek International in 1995. G. Rodden. 11:8.
PERFORMANCE of common feedback regulators for first-order and deadtime dynamics. B.C. Haggman et al. (T160) 4:46.
PERFORMANCE of jet aeration and mixing technology in activated sludge processes. R.C. Backman et al. (T391) 10:41.
PERSONAL PROFILE. Competitiveness will be the force that drives Canada's pulp and paper industry. G. Rodden. 12:17.
PILOT TRIALS using a trickling filter to tret a TMP newsprint mill effluent. P.R. Stuart et al. (T467) 12:74.
POLLUTION CONTROL. IVIC: A novel approach to non-condensable gas handling. R.W.C. Thew. (T94) 3:42.
POLLUTION CONTROL. Shock loading lagoons and activated sludge treating bleached kraft mill wastewater. B. Weeks et al. (T295) 8:15.
POLLUTION CONTROL. From conception to resolution: Effluent treatment upgrade at Alberni Pulp & Paper to meet special quality regulations. A.F. Koning et al. (T506) 12:114.
POWER consumption and AOX: What's going to happen in Canada? N. Peters et al. 5:11.
POWER MANAGEMENT - a critical part of total plant management. S.D. Cromey. (T436) 11:30.
PRE-CALENDERING: Operating experience on newsprint. R. Fink et al. (T59) 2:31.
PRINTABILITY. Wet pick testing. H.U. Heintze et al. (T22) 1:41.
PRINTING AND GRAPHICS meeting draws a diverse crowd. J. Bailey. 12:11.
PROCESS CONTROL. Improvement of product uniformity using statistical process control (SPC) in a BCTMP mill. T. Ho et al. (T18) 1:37.
PROCESS CONTROL education: An academic perspective. W.R. Cluett. (T37) 1:57.
PROCESS CONTROL. Co-ordination of cross direction control. H. Mustonen et al. (T120) 3:69.
PROCESS CONTROL. Performance of common feedback regulators for first-order and deadtime dynamics. B.C. Haggman et al. (T160) 4:46.
PROCESS CONTROL. Adaptive control of a paperboard machine. Q. Xia et al. (T194) 5:51.
PROCESS CONTROL. The evolution of an on-line model-based optimization system. C.F. Shewchuk et al. (T220) 6:29.
PROCESS CONTROL. Adaptive control applications in pulp and paper. B. Gough et al. (T241) 6:51.
PROCESS CONTROL. New opportunities for supervisory process control. D.M. Harvey. (T250) 6:61.
PROCESS CONTROL. Adaptive retention control in a paper machine. T. Rantala et al. (T299) 8:20.
PROCESS CONTROL. Control performance assessment. L.D. Desborough, et al. (T441) 11:35.
PROCESS CONTROL. Model predictive control of a continuous Kamyr digester at SCA-Nordliner, Munksund, Sweden. R. Michaelson et al. (T537) 12:146.
PROCESS UPGRADE. The impact of chlorine dioxide delignification on pulp manufacture and effluent characteristics at Grande Prairie, AB. D.C. Pryke et al. (T230) 6:40.
PRODUCTION of new grades of mechanical pulp. K.N. Law et al. (T137) 4:23.
PRODUCTION proven capabilities in sym-sizer pigmenting. R. Rantanen et al. (T370) 9:67.
PROJECT: The latest in single jet shower technology. M.M. Cutts. (T356) 9:52
PROJECT MANAGEMENT. Implementation of new technology at Meadow Lake: A successful case study. D.A. Fromson et al. (T26) 1:45.
PROVEN TECHNOLOGY for recovery boiler flue gas scrubbers. J.L. Sams. (T433) 11:27.
PROPOSED air emission standards for US mills. N. McCubbin. 2:67.
PULP QUALITY. Screening and cleaning technology is being improved all the time. P.N. Williamson. 4:9.
PULP AND PAPER maintenance for today and tomorrow: What you really need to know. J.R. Chute. (T71) 2:44.
PULP AND PAPER process control training since 1984. W.L. Bialkowski et al. (T182) 5:39.
PULPING. Modification of high-consistency oxygen delignification for enhanced performance. (T351) 9:48.
PULPS. Mechanical and chemithermomechanical pulps from second-growth softwoods. J.V. Hatton et al (T460) 12:67

QUALITY CONTROL. From ISO-9003 to Q-9001-1991: A quantum leap. L. Murphy. (T41) 1:64.

R&D INVESTMENT. The forest industries R&D and innovation program. D.S. Shaw. (T215) 5:73.
RECEIVING WATER environmental effects associated with discharges from Ontario pulp mills. K.R. Munkittrick et al. (T199) 5:57.
RECOVERY BOILERS. Development of a dry black liquor gasification process. E. Dahlquist et al. (T73) 2:46.
RECOVERY BOILERS. Char bed and smelt properties mill studies. B. Warnqvist. (T313) 8:34.
RECOVERY BOILERS. Effect of liquor type and pyrolysis rate on the steam gasification reactivities of black liquors. A.R.P. Van Heiningen et al. (T358) 9:55.
RECOVERY BOILERS. Proven technology for recovery boiler flue gas scrubbers. S.D. Cromey. (T436) 11:30.
RECOVERY FURNACES. Monitoring of recovery fouling and plugging using furnace draft loss. V.C. Uloth et al. (T244) 6:54.
RECYCLED FIBRES. Production of new grades of mechanical pulp. K.N. Law et al. (T137) 4:23.
RECYCLING. Repulpable adhesives: Current status. N. Jarvis. (T43) 1:70.
RECYCLING. De-inking sorted office waste. L.D. Ferguson et al. (T89) 2:62.
RECYCLING. Cleaning the clothing on paper machines that use 100% recycled fibre. R. Green. 3:16.
RECYCLING. ONP re-use without deinking: Short sequence recycling. T. Blain et al. (T186) 5:43.
RECYCLING. Deinkability of waterborne flexo inks by flotation. C. Ackermann et al. (T307) 8:28.
RECYCLING. Effects of deinking on the recycle potential of papermaking fibres. J.L. Klofta et al. (T320) 8:41.
RECYCLING. Newsprint deinking: Unit operations studies of flotation-wash deinking. J.K. Borchardt et al. (T374) 10:24.
RECYCLING. Characterization of deinking sludge and its ashed residue. J. Latvasomppi et al. (T381) 10:31.
RECYCLING life cycle analysis of newsprint: A European view. A. Karna et al. (T444) 11:38.
RECYCLING OFFICE WASTE. The color-stripping of office wastepaper with sodium hydrosulphite. M.J.A. Hache et al. (T511) 12:120.
RECYCLING. Two applications of hydrosulphite dye-stripping in paper recycling: Yellow directory and colored ledger. I. Dumont et al. (T527) 12:136.
REPULPABLE adhesives: Current status. N. Jarvis. (T43) 1:70.
REVIEW of leachate and ground water quality at three kraft mill landfills. A.C. Liard. (T550) 12:161.
ROLE of table activity in fourdrinier forming. A. Kiviranta. (T202) 5:60.
ROLE of control valves in process performance. G. Taylor. (T473) 12:80.
ROUTINE pump maintenance: Is it all necessary? R.C. Mackay. (T45) 1:73.

SAFETY of chlorine-bleached paper products. E.R. Nestmann et al. (T133) 3:19.
SAFEST MILL. Complete results, Safest Mill in Canada Contest 1993. 3:36.
SCREENING and cleaning technology is being improved all the time. P.N. Williamson. 4:9.
SÉCHAGE du papier à haute intensité. I.I. Pikulik. (T109) 3:57.
SECONDARY waste treatment system CP Forest Thunder Bay mill. P.M. Wong. (T170) 4:57.
SESSION notebook. P&PC staff. 3:35.
SHEET FORMING. The impact of forming fabric structures on print quality. R. Danby. (T29) 1:48.
SHOCK LOADING lagoons and activated sludge treating bleached kraft mill wastewater. B. Weeks et al. (T295) 8:15.
SIX STEPS to purchasing a training simulator. L. Owen et al. (T254) 6:65.
SODIUM hydrosulphite brightening: Laboratory versus mill results. A. Fluet et al. (T316) 8:37.
SPECK removal index and a speck detachment index for flotation de-inking. A. Serres et al. (T117) 3:66.
SPEEDING up your computer. N. McCubbin. 7:49.
SPREADSHEET upgrades. N. McCubbin. 9:71.
STEAM ECONOMY. Thermal energy conservation program. C. Parsons. (T364) 9:61.
STICKIES REMOVAL. The effects of surface properties on stickies removal by flotation. T.F. Ling. (T501) 12:109.
STOCK FLOW. Fluid and fibre flow near a wall slot in a channel. P.H. Oosthuizen et al. (T174) 5:27.
STORAGE TANKS. Floating roof for chlorine dioxide storage tank. R. Ma. (T129) 3:79.
SUBJECT. Energy savings using fine bubble diffuser technology. C.N. Jardine. (T541) 12:150.
SURVEY of additives for papers containing mechanical pulp. G. Boucher et al. (T287) 7:41.
SYSTEM for relieving nip loads of rewinding rolls on shaftless two-drum winders. H. Schonmeier et al. (T433) 11:17.
SYSTEMS CONTROL. Adaptive control with direct delay estimation. A. Elnaggar et al. (T149) 4:35.

TCF PULP. High-consistency bleaching technology for TCF pulps. J.Kappel et al. (T1) 1:20.
TECHNICAL competence. R.J. Horner. 3:33.TECHNICAL SECTION's 79th year in review. R.J. Horner & D.H. Paterson. 3:20.
TECHNICAL SUMMARY: A survey of pulp and paper mill effluents for their potential to induce mixed function oxidase enxyme activity in fish. P.H. Martel et al. 11:34.
TEST & MEASUREMENT. Novel high resolution image analysis for measuring residual ink in pulp, paper and board. R.J. Trepanier. (T547) 12:156
THERMAL ENERGY conservation program. C. Parsons. (T364) 9;61.
TIMES they are a changin', G. Rodden. 7:11.
TOP PICKS. J. Bailey. 11:10.
TRAINING. Integrating a training simulator and a traditional training program at James River-Marathon. B. Hunter et al. (T124) 3:73.
TRAINING. Six steps to purchasing a training simulator. L. Owen et al. (T254) 6:65.
TRANSPORT and drainage processes in a screw press. T.H. Egenes et al. (T65) 2:38.
TRIPAP makes a go of CPFP's old Trois-Rivières mill. J. Bailey. 9:15.
TWO APPLICATIONS of hydrosulphite dye-stripping in paper recycling: Yellow directory and colored ledger. I. Dumont. et al. (T527) 12:136.
TWO-DIMENSIONAL control systems: Application to the CD and MD control problem. P.E. Wellstead et al. (T75) 2:48.

UPGRADING system software. N. McCubbin. 6:75.
USE of a novel enzyme treatment to improve the efficiency of shive removal by bleaching. J.S. Tolan et al. (T488) 12:96.

VALMET WINBELT winders at the Holmen Paper AB, Hallsta paper mill, Sweden. H.M. Ericsson. (T259) 6:70.

WET PICK testing. H.U. Heintze et al. (T22) 1:41.
WHEN and why to use your computer for communications. N. McCubbin. 12:170.
WHITHER woodyards? G. Rodden. 11:14.
WINDING. A system for relieving nip loads of rewinding rolls on shaftless two-drum winders. H. Schonmeier, H. et al. (T422) 11:17.
WINNING gadgets from coast to coast. S.M. Stevenson. 3:32.
WOODYARDS. Whither woodyards? G. Rodden. 11:14.
WORLD of pulp and paper at your fingertips. J. Bailey. 1:61.
WORLD's largest high pressure and temperature recovery boiler. A. Fujisaki, A. et al. (T452) 11:46. **P&PC**